Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Stock PG, Barin B, Murphy B, et al. Outcomes of kidney transplantation in HIV-infected recipients. N Engl J Med 2010;363:2004-14.

Supplementary Appendix

A. KIDNEY CRITERIA FOR TRANSPLANTATION

Indications for Kidney Transplantation
Chronic Kidney Disease

Exclusionary criteria:

1. Patient has uncorrectable, significant coronary arterial disease or active angina.
2. History of metastatic cancer or ongoing chemotherapy.
3. Current IV drug abuse.
4. Current neurological impairment with significant cognitive impairment and no surrogate decision maker.
5. Active systemic infection.
6. Presence of psychotic behavior and no surrogate decision maker.
7. Patient refuses to be evaluated.

Patients will not be eligible for an evaluation at UCSF if they meet any of the following criteria:

1. BMI $\geq$ 40. Our current guideline for transplant is a BMI < 34 for diabetic patients and a BMI < 38 for non-diabetic patients.
2. Current tobacco use. All patients must stop smoking for at least 6 months prior to the evaluation appointment.
3. Current alcohol and substance abuse. All patients must stop alcohol or substance abuse for six months prior to the evaluation appointment.
4. Adult patients that have an estimated GFR > 25 ml/min. According to the United Network for Organ Sharing, adult candidates can not accrue waiting time until their GFR < 20 ml/min.

B. METHODS

There were no absolute HAART restrictions although atazanavir was discouraged due to the use of post-transplant H-2 blocker use. Potential modification of thymidine analogue nucleoside use was considered as well due to potential interactions with MMF. Referring health care providers were advised of potential drug interactions between HAART and immunosuppressive agents and the importance of communicating with study personnel prior to making any medication changes.

C. STATISTICAL ANALYSIS

Transplants after October 1, 2003 from an SRTR data file with a cut-off date of May 1, 2008 were used to obtain the SRTR survival estimates and the 6-month and 1-year cumulative incidence of rejection.

The following potential predictors of graft loss in the 3-year period post-transplant were evaluated in univariate proportional hazards models: recipient race, hepatitis C infection status, delayed graft function, thymoglobulin induction, initial immunosuppressive medication (cyclosporine vs. tacrolimus), rejection occurrence (as a time-dependent covariate), donor age and donor type (living vs. deceased), high-infectious risk donor (recent risk behaviors for HIV, HBV or HCV with negative serologies), expanded criteria donor (ECD), number of mismatched donor-recipient antigens (>4 vs. ≤4), cold ischemia time (≥16 vs. <16 hours) and panel reactive antibody (PRA) (>0 vs. 0) at transplant. The last three variables were dichotomized at the median value. Covariates with a p value of less than 0.1 from the univariate model were included in a multivariate model.

The following potential predictors of first acute allograft rejection were evaluated: race, age, accrual period (second half vs. first half), use of basiliximab/daclizumab induction therapy, any opportunistic complication history, hepatitis C infection status, baseline CD4+ T-cell count, donor type, number of mismatched donor-recipient antigens and PRA at transplant. Post-transplant CD4+ T-cell count, HIV RNA level, protease inhibitor use, cyclosporine use and trough level, tacrolimus use and trough level and mycophenolate mofetil use were analyzed as time dependent covariates.

D. CONTRIBUTIONS

The study was designed by the principal (Stock) and co-principal (Roland) investigators of the NIH U01 Solid Organ Transplantation in HIV: Multi-site Study (AIO52748), and protocol modifications and decision to publish were made by the study steering committee and publication committee respectively. The first draft was prepared by the study PI, with statistical sections and data analysis provided by study statisticians (Barin, Stablein).